

# A Letter of Support for High School Science Preparation

To our colleagues in high school teaching, guidance, and administration,

While Florida requires Biology for high school graduation, it is critical for every student capable of trade school or a college degree to take a full year each of chemistry and physics. That prepares them to be *four times* more likely to finish college on time than their peers. Those students typically *earn a letter grade higher* in their introductory college STEM courses, impacting scholarships and graduate program admissions. High school chemistry and physics is also the recommended preparation for the most in-demand trade programs in fields from manufacturing to healthcare.

The rate at which Florida's high school students take chemistry and physics is critically low — around 22%. Despite most schools having teachers in these areas, enrollment is well below capacity. Low participation in these core science courses is accompanied by a disturbing under-enrollment of girls, students of color, and those from low-income households. Our chemistry and physics enrollment rates need to be near 80%, with regular and honors courses playing a large role, to keep up with states and other countries that have chosen to make this a priority. Those are the graduates with whom our students will be competing for jobs increasingly dependent on technology. Fortunately, schools across our state have already found sustainable solutions. The most reliable is also a simple one:

*Enroll students **by default** into chemistry and physics.*

*Require parent or guardian approval to opt out.*

A decision with such far-reaching consequences must not depend on a teenager to recognize the difference between these courses and a list of equal-sounding electives. We hope you will take every measure within your ability, resources, and staffing to prepare the students in your care for 21st century careers. The signatories of this letter are your partners in this effort. Let us know how we can help.

Respectfully and with our full support,

Adam LaMee, Teacher-in-Residence, **UCF Physics Teacher Education Coalition**

Michael D. Johnson, Dean of the **UCF College of Sciences**

Eduardo Mucciolo, Chair of the **UCF Department of Physics**

Griff Parks, Director of the **UCF Burnett School of Biomedical Sciences**

Cherie Yestrebeky, Chair of the **UCF Department of Chemistry**

Omar Zeidan, Chief of Proton Therapy Physics, **Orlando Health – UF Health Cancer Center**

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Email [adam.lamee@ucf.edu](mailto:adam.lamee@ucf.edu) with questions or to add your endorsement.